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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,505	08/01/2001	Toru Aoki	2001-0565A	5693

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EXAMINER	
BRITT, CYNTHIA H	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/831,505	AOKI, TORU	
	Examiner	Art Unit	
	Cynthia Britt	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-4 are presented for examination.

Specification

The substitute specification, including the abstract, filed January 12, 2004 is acceptable and has been entered. Therefore the objection to the specification has been withdrawn.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on September 25, 2003 has been considered by the examiner.

Drawings

The drawings were received on January 12, 2004. These drawings are acceptable.

Response to Arguments

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 rejected under 35 U.S.C. 102(e) as being anticipated by Cho et al. U.S. Patent No. 6,158,039.

As per claim 1, Cho et al. teach the claimed system having a descrambler for restoring scrambled data in the process of encoding data, includes first and second memories for correcting an error, and a memory controller for transmitting error-corrected data to the descrambler while data read and demodulated from the optical disk is written in one of the memories, and error-correcting data written in the other memory while the demodulated and error-corrected data is written and read. The system includes the steps of: alternatively writing one error correcting block in the first and second memories upon receiving demodulation data of one data sector including main data, inner parity data and outer parity data, error-correcting a corresponding one error correcting block; and reading error-corrected data from one of the first and second memories when writing one error correcting block in the other one of the first and second memories. After data is corrected it is transmitted to a host. (Abstract, column 3 lines 20-54, column 4 lines 39-61, Figure 3)

As per claim 2, Cho et al. teach for the PI error correction of the first row, data is read from a data region and data is read from a PI region to detect and correct the error. The error-corrected data is again written in a position where the error occurs. The PI

error correction is performed with respect to both the main data and PO. To calculate a syndrome, an error position and an error value of one row, the data and parity are read by the unit of a word. Since the maximum number of bytes per row which can correct the error is 10 bytes, reading and writing are repeated by 10 times. PO error correction is performed in the column direction by the unit of a byte, the memory should be accessed by the unit of a byte. To calculate the syndrome, error position and error value of one column, the data and parity are read. The maximum number of bytes per column that can correct the error is 16 bytes. Error information detected from the descrambler and error detector is stored in the second memory under the control of a microprocessor memory access controller (FIG. 7, column 2 lines 42-49, column 5 lines 61 through column 6 line 18)

As per claims 3 and 4, Cho et al. teaches the memory controller writes one error-correcting block in the third memory. The memory controller error-corrects data written in the third memory and simultaneously writes the next one error-correcting block in the fourth memory. Next, the memory controller error-corrects data written in the fourth memory, transmits data error-corrected from the third memory to the memory read controller, and writes the next one error correcting block in the third memory. Then, the memory controller error-corrects data written in the third memory, transmits the error-corrected data of the fourth memory to the memory read controller, and writes the next one error correcting block in the fourth memory. The memory controller checks whether the reception of demodulated data has ended. (Fig 5, column 4 line 65 through column 5 line 16)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Britt whose telephone number is 703-308-2391. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CB

Cynthia Britt
Examiner
Art Unit 2133

ALBERT DECADY
SUPERVISORY PATENT EXAMINER
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